

Automation, Our Time is Now

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March 2013 - Today we are in the middle of two manufacturing worlds—the outsourcing of work to low-cost locations and now the returning of industrial manufacturing to the U.S. When the wave swept much of our work overseas, we were not prepared. While we had expertise and an experienced and talented workforce, we found ourselves unable to respond to the new marketplace demands. This is where today's automation comes into play. When we combine the need to be competitive in our current work with the need to be a viable source for work that is returning, automation is the answer.

Automation. This word brings many thoughts to mind—expensive, complicated and job losses on the negative side; and reliable, productive, repeatable and quality on the positive side. All these thoughts are legitimate and need to be considered when debating automation. If you have not considered investing in new automation, or have looked into it and are not sure it is the right path—not only is it right, now is the best time to do it.

Savings

Countries with low labor costs will always be there, but nothing can compete with automation's ability to produce parts quickly and continuously with little direct labor and little to no waste or rework. While there are ROI considerations with new equipment purchases, they can be offset by reducing payroll in the form of multiple shifts and overtime. Increased productivity, reduced waste and less rework help build a positive bottom line.

Quality

Whether it is a robotic welder, CNC mill or deburring cell, accuracy and repeatability are the staples of automation. Today's automation is by far more accurate and repeatable than ever. Working for hours, days and even years at a time without fatigue or wear, automation becomes an easy choice over manual operations. More importantly, when a customer requires tight tolerances and 100 percent inspection, only automation can fill this need.

Production

Meeting the demands of production is the most common reason to consider automation. Automation, in most applications, can produce more parts per unit time than working without it. Automation also enables us to manufacture products around the clock with little direct labor and without breaks, vacations or illness. With just-in-time and reduced inventory requirements driving business, this is a strong benefit.

Safety

Removing workers from the risks of the immediate work area and making them “supervisors” that guide and oversee production greatly reduces the risks involved with manufacturing. This builds a better workplace environment and reduces the costs associated with injury and health care claims, strengthening the bottom line.

Stability

As our older workforce has retired and a new generation of workers has settled in, we have seen a distinct difference in how we do business. Today’s younger workers have grown up with and embraced technology. They understand its complexities and recognize its value in the future. As long as these workers understand manual operations, they can transfer those skills to automation. It is this new generation that will combine the skilled processes of today with technologies of tomorrow to build a stable future.

Investing in automation can be risky, especially for a smaller company. By staying where you are and not investing, you reduce immediate risk; however, that risk may resurface later. Without the ability to better control costs and production efficiencies or to offer new processes, you may only be extending your risk by a few years. As the saying goes, “If you’re not doing it, you can be certain your competitor is.”

The landscape of today’s manufacturing is evolving every day. If we expect to be viable and profitable, every facet of our business must be competitive, even with those halfway around the world. American manufacturers have the one key advantage over our low-cost competitors—experience. We can use this advantage, while leveraging and combining automation, to compete in a global marketplace and once again become the leaders everyone wants to follow. **FFJ**

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